



Rampart Streetcar Line: Emergency Recovery Project Opinion of Probable Cost						
#	Item	Unit	Quantity	2014 Bid Cost	2022 Unit Cost ¹	Extended
1	Purchase of Rampart/Canal Street Webbing materials ⁵ (estimate assumes that materials are 75% of the total cost of the work)					
	<i>Trolley Wire Conductor - 4/0 Grooved H.D. Copper</i>	FT	500	\$43.66	\$48.00	\$ 18,000.00
	<i>Trolley Wire Frog</i>	EA	6	\$766.00	\$1,256.24	\$ 5,653.08
	<i>Trolley Wire Cross-over</i>	EA	3	\$6,193.00	\$10,156.52	\$ 22,852.17
	<i>Curve Benders</i>	EA	25	\$4,061.00	\$6,660.04	\$ 124,875.75
	<i>OCS Cross Wire / Head Guy Assembly</i>	EA	8	\$8,111.00	\$13,302.04	\$ 79,812.24
	<i>OCS Pull OFF Assembly</i>	EA	26	\$2,631.00	\$4,314.84	\$ 84,139.38
	<i>OCS Termination Wire Assembly</i>	EA	7	\$2,393.00	\$3,924.52	\$ 20,603.73
2	Demo and reinstall new trolley pole anchor bolts ⁹ per location					
	<i>Labor</i>	EA	4	-	\$ 875.00	\$ 3,500.00
	<i>Misc. equipment, tools, materials and concrete testing</i>	EA	4	-	\$ 250.00	\$ 1,000.00
3	Reinstallation of Rampart/Canal Street Webbing - Labor and Equipment (estimate assumes that labor is 25% of the total cost of the work and equipment is 10%)	LS	1	-	\$124,577.72	\$ 124,577.72
4	Realignment of Rampart Streetcar Line OCS components from Elysian Field to Bienville ^{2,4}	LF-wire	12706	-	\$9.21	\$ 117,022.26
5	Purchase & Install Ornamental OCS Pole, Base Plate and Light Fixture (pole AV88) ⁵					
	<i>12" fluted pole</i>	EA	1	\$15,557.00	\$17,112.70	\$ 17,112.70
	<i>decorative base plate covers</i>	EA	1	\$2,913.00	\$3,204.30	\$ 3,204.30
	<i>Replica Light (Attachment and Luminaires)</i>	EA	1	\$7,174.00	\$7,891.40	\$ 7,891.40
6	Purchase & Install of Rampart Streetcar Line OCS Hardware from Bienville to Canal Street ⁵ (poles #AV88, #AV89, #AV90 and #AV91)					
	<i>OCS cantilever assembly and hardware attachment</i>	EA	4	\$3,397.00	\$5,571.08	\$ 22,284.32
	<i>Replica Light (Attachment and Luminaires) - AV89, AV90 and AV91</i>	EA	3	\$7,174.00	\$11,765.36	\$ 35,296.08
7	Installation of Rampart Streetcar Line OCS Hardware from Bienville to Canal Street ³	LF-wire	1290	-	\$22.00	\$ 28,380.00
8	Testing of reinstalls and retensioning ¹⁰	LS	1	\$50,000.00	\$63,338.50	\$ 63,338.50
9	Cleaning of Streetcar stops ⁸	EA	6	-	\$1,200.00	\$ 7,200.00
10	Maintenance and Protection of Traffic ⁶	DAY	68	-	\$1,200.00	\$ 81,600.00
Subtotal Cost						\$868,343.64
Mobilization / Demobilization (3%)						\$26,050.31
10% Profit						\$89,439.39
Subtotal including OH&P						\$983,833.34
15% Contingency						\$147,575.00
Estimated Total Cost =						\$1,131,408.34

NOTES:

- The 2022 cost takes into account the recent industry-wide spikes in the material costs of metals and concrete.
- Labor rates are from 1/22 Prevailing Wage Rate for Orleans Parish
- Alignment Bienville to Elysian Fields is STA 106+75 to STA 170+28 = 6353 LF of route x 2 wires = 12,706 LF-wire
- Alignment Bienville to Canal Street is STA 106+75 to STA 100+30 = 645 LF of route x 2 wires = 1,290 LF-wire
- Work costs assumes
- "straight" alignment : 6-8 man crew; 3 JLG trucks; 8-10 hour shifts + equipment (3-JLG lifts, truck) ≈ \$5.21/LF labor + \$4/LF equip.
- Bacon-Davis rates for Electrician in New Orleans = \$32.25 + \$13.75 fringes = \$46.00/MH.
- HGU: 8 men x 3 @ 12 hour weekend shifts (\$46/hr on premium time) + equipment (3-JLG lifts, truck, lights, etc.)
- OCS Pole, OCS hardware and luminaire costs are from Archer Western 2014 bid for Rampart, escalated using Research Division of the Federal Reserve Bank of St. Louis, *Producer Price Index by Commodity: Metals and Metal Products: Power Wire and Cable* to Dec. 2021
- this use an index of 2004 prices equal to 100
- a shift from June 2014 to Dec. 2021 provided an index shift from 203.0 to 332.8 = a multiplier of 1.64
- Ductile Iron castings index rose from 158.8 to 174.72 during the same time = a multiplier of 1.10
- Assume duration of 60 work days plus 4 weekends ≈ 68 day shifts
- assume multiple, concurrent locations for traffic control each day
- Trolley wire cost: using the Federal Reserve research shows that trolley wire index (using copper wire to replicate the bronze wire costs) increased from 342.4 to 406.2 - or 18.6% - in calendar year 2021. So the engineer's 2021 estimate of \$40/ft was increased to \$48/ft
- Assume 2 Laborers @ \$18/hr: takes two days per shelter = \$576. Assume that = 60% of the total, so cost per shelter = \$960/EA
- add 25% for inefficiency for working between active streetcar tracks. Use \$1200/EA.
- Labor cost for anchor bolt replacement ≈ \$875
Demolition: 2 Laborers @ \$18/hr x 16 hours \$576.00
Place concrete: 1 Laborer @ \$18 + 1 Cement Mason @ \$19.34 x 8 hrs \$298.72
- Retensioning of trolley wire cost is based on 2014 Kiewit bid, and escalating Electrician wage rate at 3% per year to 2022 dollars